

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Proposed Oil Wells- State 13X-12-2 and 15-11
Proposed Implementation Date:	Spring/Summer 2011
Proponent:	MCR LLC, PO Box 716, Shelby, MT 59474-Lessee & Operator
Location:	Section 12, T37N, R4E State #13X-12-2-NW4SW4, 698' FWL & 2181' FSL Section 11, T37N, R4E State #15-11 SW4SE4, 347' FSL and 1411' FEL
County:	Liberty
Trust:	Common Schools

I. TYPE AND PURPOSE OF ACTION

MCR LLC-lessee and operator has requested permission to drill 2 oil wells on State Land in the Whitlash East State Unit. The wells will be drilled into the Swift Formation (top of the Rierdon). The proposed wells are located on classified grazing land. A drilling pad will be constructed and a single rig will drill the wells. If sufficient quantities of oil are present, then commercial well sites will be developed. If tests indicate that commercial quantities of recoverable oil are not present, then the wells will be plugged and reclaimed in conformance with standards approved by the Montana Board of Oil and Gas Conservation.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

MCR LLC-Lessee and Operator
DNRC-Surface and Mineral Owner
Montana Board of Oil and Gas Conservation

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Montana Board of Oil and Gas Conservation permit form 22 has been submitted for approval for the wells. MCR LLC has the State of Montana Oil and Gas lease #OG-6423-61A associated with this state land. DNRC is not aware of any other agencies with jurisdiction or other permits needed to complete this project.

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action) – Deny MCR LLC-Lessee and Operator permission to drill the oil wells.

Alternative B (the Proposed action) – Grant MCR LLC-Lessee and Operator permission to drill the oil wells using the Conrad Unit Office's recommendations to minimize adverse environmental impacts.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Soils at the proposed well sites are silty to clayey in texture. Topography is flat to gently rolling and suitable for oil well drilling and access road use. The top 12 inches of soil will be removed from the well site and stock piled for reclamation purposes. Access to the well sites will be from Flat Coulee Road, using existing approaches and two track roads. The well site pads will require a small amount of dirt work and leveling. Road improvements will not be needed at this time. The proposed action may cause localized areas of soil erosion and compaction from the manipulation of vehicles and equipment on the surface. A small drainage on the south side of 11-15 well pad will require installing a silt fence to prevent runoff from entering a small water way. The proposed action will temporarily disturb a small portion of the landscape. Reclamation and returning this site to rangeland production will minimize long-term soil loss. Silt fence will be utilized to minimize any erosion of the site while drilling and reclamation is taking place. No long-term negative impacts on the soil resources are expected. The rangeland areas will be reseeded per the seeding recommendations included in item #7.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

There are numerous documented and/or recorded water rights associated with the proposed project area. There is also a reservoir located below the proposed project area. The proponent will be required to protect the surface water by installing silt fence around the disturbed soils and drainage improvements around the well site to help protect surface water.

Other water quality and/or quantity issues will not be impacted by the proposed action.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Dirt work associated with drilling operations and general vehicle traffic on area road will generate airborne dust. These activities will minimally affect air quality for a very limited amount of time. No cumulative effects to air quality are anticipated.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Two 150' X 150' well pad areas consisting of 0.52 acres of classified grazing land will be impacted by ground leveling, the removal of topsoil and the manipulation of vehicles on the ground surface. The proponent will be responsible for annual and noxious weeds that may arise from implementing this proposed action. The site will be returned to grazing land following site reclamation. The proposed action will impact a small portion of the landscape. Following drilling operations disturbed areas will be reclaimed and reseeded with the following species: western wheatgrass 35%, slender wheatgrass 35%, blue bunch wheatgrass 15%, green needle grass, 10%, and Lewis blue flax 5%. The seeding rate will be 7 lbs/acre if drilled and 14 lbs/acre if broadcast seeded.

A review of Natural Heritage data through the NRIS was conducted for T37N, R4E. There was one species of concern and zero potential species of concern noted on the NRIS survey: Flowering Plants-Long-sheath

Waterweed. The proposed project area has been previously disturbed in road construction and does not contain this species in the proposed project area.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

The area is not considered critical wildlife habitat. However, this tract provides habitat for a variety of big game species (mule deer, whitetail deer, and pronghorn antelope), predators (coyote, fox, and badger), upland game birds (sharp tail grouse, Hungarian partridge), other non-game mammals, raptors and various songbirds. The proposal does not include any land use change which would yield changes to the wildlife habitat. The proposed action will not impact wildlife forage, cover, or traveling corridors. Nor will this action change the juxtaposition of wildlife forage, water, or hiding and thermal cover. Wildlife usage is expected to return to "normal" (pre-action usage) following the drilling operations. The proposed action will not have long-term negative effects on existing wildlife species and/or wildlife habitat.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

There are no known threatened or endangered species, sensitive habitat types, or other species of special concern associated within the proposed project area. At this time, no known unique, endangered, fragile or limited environmental resources have been identified within the proposed project area.

A review of Natural Heritage data through the NRIS was conducted for T37N, R4E. There were five species of concern and one potential species of concern noted on the NRIS survey: Birds—Sprague's Pipit, Chestnut-collared Longspur, Long-billed Curlew, McCown's Longspur, Sharp-tailed Grouse, and Swainson's hawk. This particular tract of native rangeland does not contain many, if any of these species. If any are present, they will be dispersed into the surrounding permanent cover and return to the project area once it is completed.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

A cultural resource inventory was completed by the Conrad Unit Office on August 27, 2013. No cultural resources were found within the project area. Cultural resources will not be impacted by this proposed project.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The proposed action will occur in a remote area and will not cause a large change in the aesthetic character of the land. The main industries in this area are agricultural, grazing, and oil and gas production. The proposed wells are located in the Whitlash East State Unit, which is a producing oil field. There are several producing oil wells in the immediate area which are located on state land. If producing wells are developed, a small portion of the lands aesthetic character will be changed. Daytime noise levels may slightly increase during the time of the project, but noise levels will return to "normal" (pre-action conditions) after the project is completed. No other changes to the aesthetics character of the land area are expected.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

The demand on environmental resources such as land, water, air, or energy will not be affected by the proposed action. The proposed action will not consume resources that are limited in the area. There are no other projects in the area that will affect the proposed project.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

The proposed wells are located in the Whitlash Oil field, Whitlash East State Unit. There are no other projects or plans being considered on the tract listed on this EA.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

The proposed well will not change human safety in the area.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

The proposed wells are located in the Whitlash East State Unit, which is a producing oil field. There are several producing oil wells in the immediate area. The intent of the proponent's action is to locate and remove oil for commercial sale. If tests indicate the existence of economically recoverable quantities of oil, producing wells will be established, and extraction will follow. If producing wells are developed, the Common School Trust will receive royalty payments at current market rate for all oil produced by the well. Activities associated with the proposed action will minimally affect the surface use of the land (grazing). A minimal amount of acreage will be taken out of production if producing wells are developed. All actual damages to the surface have been mitigated between the surface lessee and the proponent. The project will not add to or detract from other industrial, commercial, or agricultural activities in the area.

No direct or cumulative impacts are anticipated as a result of the proposal.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

The proposed action will create well drilling jobs and generally add to the economy of surrounding communities.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

The proposed action will add to the tax revenue.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

There will be slight increases in traffic, no changes in traffic patterns, and no need for additional fire protection, or police services. MCR LLC is working with Liberty County's Road Department to obtain Trucks Entering signs for the proposed well sites in order to further mitigate increases in traffic caused during drilling.

There will be no direct or cumulative effects on government services.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

The proposed action is in compliance with State and County laws. No other management plans are in effect for the area.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

This tract of state land is rural and generally has low recreational value. The tract is legally accessible and the proposed action is not expected to impact general recreational use or other activities on this state tract.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing

The proposal does not include any changes to housing or developments.

No direct or cumulative effects to population or housing are anticipated.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

There are no native, unique or traditional lifestyles or communities in the vicinity that would be impacted by the proposal.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

The proposed action will not impact the cultural uniqueness or diversity of the area.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The proponent has interest in the State of Montana Oil and Gas Lease #OG-6423-61A that is associated with this state land tract. This lease entitles them to reasonable development of oil and gas wells on this tract after DNRC review. The Common School trust will be compensated for all oil removed from producing wells. The surface lessee will receive \$100.00 for surface damages on each well.

	Name: Erik Eneboe	Date: August 30 2013
	Title: Conrad Unit Manager, Central Land Office	

V. FINDING

25. ALTERNATIVE SELECTED:

Grant MCR LLC-Lessee and Operator permission to drill the oil wells using the Conrad Unit Office's recommendations to minimize adverse environmental impacts.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The completion of the EA did not identify issues that could not be reasonable mitigated.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

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EIS

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More Detailed EA

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No Further Analysis

EA Checklist Approved By:	Name: Hoyt Richards
	Title: Area Manager, Central Land Office
Signature: /s/	Date: August 30, 2013

FORM NO. 22 R 10/09 SUBMIT IN QUADRUPLICATE TO: <div style="text-align: center;">MONTANA BOARD OF OIL AND GAS CONSERVATION 2535 ST. JOHNS AVENUE, BILLINGS, MONTANA 59102</div>		ARM 36.22.307 ARM 36.22.601 Lease Name: State _____ Lease Type (Private/State/Federal): State _____ Well Number: 15-11	
Application for Permit To:			
Drill <input checked="" type="checkbox"/> Deepen <input type="checkbox"/> Re-enter <input type="checkbox"/> Oil <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Other <input type="checkbox"/>			
Operator: MCR, LLC Address: P.O. Box 716 City: Shelby State: MT Zip: 59474 Telephone Number: 406-424-8211		Field Name or Wildcat: Whitlash Unit Name (if applicable): Whitlash East State Unit	
Surface Location of Well (quarter-quarter and footage measurements): 347' FSL & 1411' FEL SW SE Section 11-T37N-R4E		Objective Formation(s): Swift	
Proposed Total Depth and Bottom-hole Location(s) if directional or horizontal well: Top of Rierdon - estimated +/- 3100'		Township, Range, and Section: 37N-R4E-11	
		County: Liberty	
		Elevation (indicate GL or KB): 3938' GL	
Size and description of drilling/spacing unit and applicable order, if any: Within Unit Boundaries - Order 7-1999		Formation at total depth: Rierdon	Anticipated Spud Date: 9/8/13

Hole Size	Casing Size	Weight / Foot	Grade (API)	Depth	Sacks of Cement	Type of Cement
11"	8 5/8"	24#	L/S	+/-350'	Cmt to Surface	0:1:0 "G:3% CaCl2
7 7/8"	5 1/2"	15.5#	L/S	TD	Cmt to Surface	Thixmix

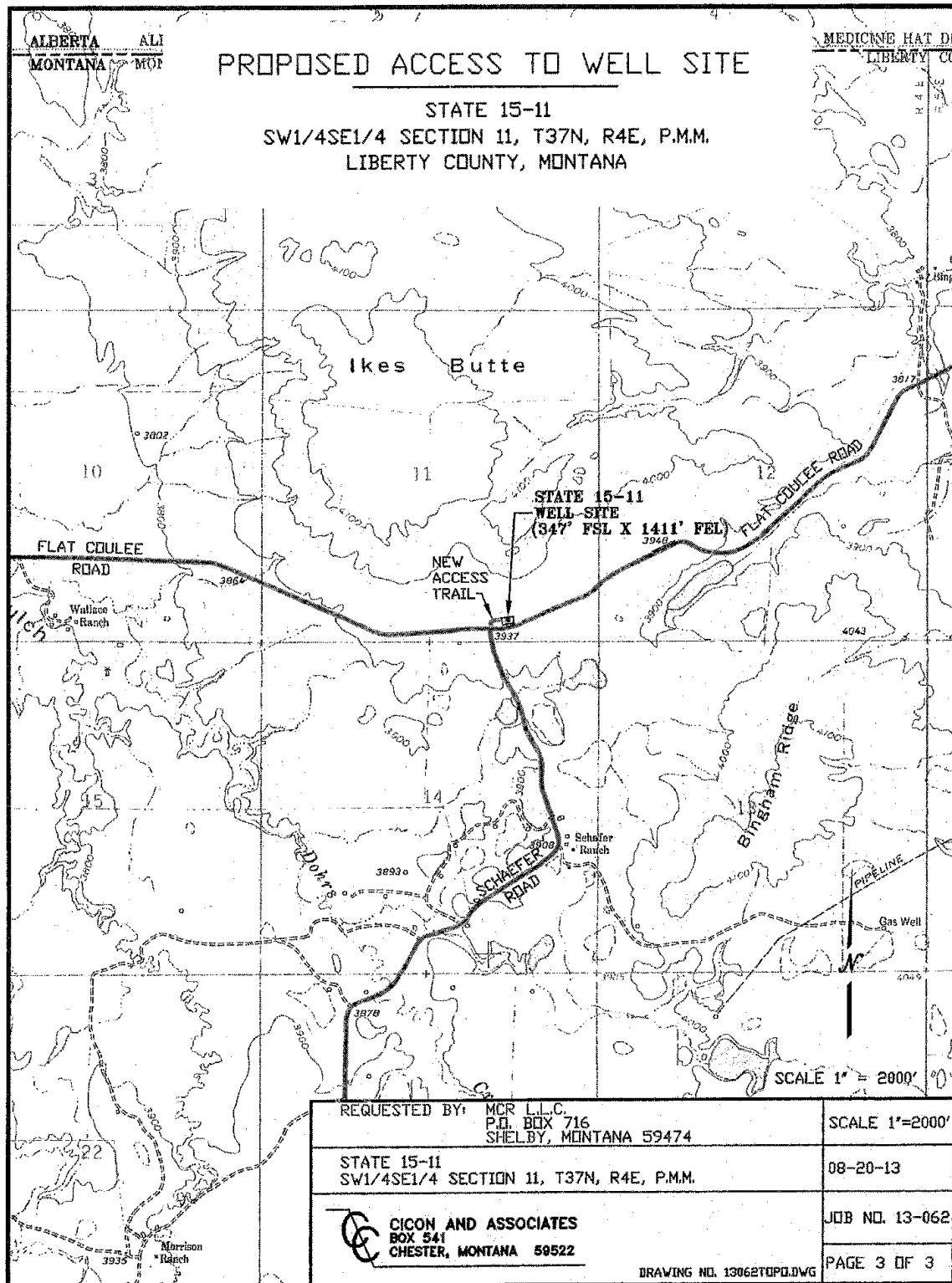
Describe Proposed Operations:
 Describe or attach labeled diagram of blowout preventer equipment. Indicate if air drilled or describe mud program.

- 1) MCR, LLC INTENDS TO DRILL A 3100' RIERDON WELL AT THE ABOVE LOCATION.
- 2) DRILL A 11" HOLE W/ FRESH WATER MUD AND SET +/- 350' 8 5/8" CASING W/ CEMENT CIRCULATED TO THE SURFACE.
- 3) DRILL A 7 7/8" HOLE FROM UNDER THE 8 5/8" CASING TO +/- 3100' (T.D.) WITH CHEM MUD.
- 4) SET 5 1/2" CASING TO T.D. AND CEMENT TO SURFACE
- 5) OPEN HOLE LOGS WILL BE RUN.
- 7) IF WELL IS NOT COMMERCIAL, WELL MAY BE CONVERTED TO AN INJECTION WELL UPON COMPLETION.

BOARD USE ONLY			
Approved (date) _____ By _____ Title _____	Permit Fee _____ Check Number _____ Permit Expires _____ Permit Number _____	The undersigned hereby certifies that the information contained on this application is true and correct: Signed (Agent) <u><i>Shelby Ebert</i></u> Title <u>Project Coordinator</u> Date <u>08/22/2013</u> Telephone Number <u>406-460-7625</u>	
THIS PERMIT IS SUBJECT TO THE CONDITIONS OF APPROVAL STATED ON THE BACK		API Number: 25 - _____ - _____	

Samples Required: NONE _____ ALL _____ FROM _____ feet to _____ feet

Core chips to address below, full cores to USGS, Core Laboratory, Arvada, CO. Required samples must be washed, dried and delivered prepaid to:
 Montana Board of Oil and Gas Conservation
 2535 St. Johns Avenue
 Billings, MT 59102



FORM NO. 22 R 10/09 SUBMIT IN QUADRUPLICATE TO: MONTANA BOARD OF OIL AND GAS CONSERVATION 2535 ST. JOHNS AVENUE, BILLINGS, MONTANA 59102		ARM 36.22.307 ARM 36.22.601 Lease Name: State	
Application for Permit To:		Lease Type (Private/State/Federal): State	
Drill <input checked="" type="checkbox"/> Deepen <input type="checkbox"/> Re-enter <input type="checkbox"/> Oil <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Other <input type="checkbox"/>		Well Number: 13X-12-2	
Operator: MCR, LLC Address: P.O. Box 716 City: Shelby State: MT Zip: 59474 Telephone Number: 406-424-8211		Field Name or Wildcat: Whitlash Unit Name (if applicable): Whitlash East State Unit	
Surface Location of Well (quarter-quarter and footage measurements): 698' FWL & 2181' FSL NW SW Section 12-T37N-R4E		Objective Formation(s): Swift	
Proposed Total Depth and Bottom-hole Location(s) if directional or horizontal well: Top of Rierdon - estimated + / - 3100'		Township, Range, and Section: 37N-R4E-12	
County: Liberty		Elevation (indicate GL or KB): 3978' GL	
Size and description of drilling/spacing unit and applicable order, if any: Within Unit Boundaries - Order 7-1999		Formation at total depth: Rierdon	
Anticipated Spud Date: 9/3/13			

Hole Size	Casing Size	Weight / Foot	Grade (API)	Depth	Sacks of Cement	Type of Cement
11"	8 5/8"	24#	L/S	+/-350'	Cmt to Surface	0:1:0 "G:3% CaCl2
7 7/8"	5 1/2"	15.5#	L/S	TD	Cmt to Surface	Thixmix

Describe Proposed Operations:
 Describe or attach labeled diagram of blowout preventer equipment. Indicate if air drilled or describe mud program.

- 1) MCR, LLC INTENDS TO DRILL A 3100' RIERDON WELL AT THE ABOVE LOCATION.
- 2) DRILL A 11" HOLE W/ FRESH WATER MUD AND SET + / - 350' 8 5/8" CASING W/ CEMENT CIRCULATED TO THE SURFACE.
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BOARD USE ONLY			
Approved (date) _____ Permit Fee _____ By _____ Check Number _____ Title _____ Permit Expires _____ Permit Number _____		The undersigned hereby certifies that the information contained on this application is true and correct: Signed (Agent) <u><i>Shelby</i></u> Title <u>Project Coordinator</u> Date <u>08/22/2013</u> Telephone Number <u>406-460-7625</u>	
THIS PERMIT IS SUBJECT TO THE CONDITIONS OF APPROVAL STATED ON THE BACK		API Number: 25 - _____ - _____	

Samples Required: NONE _____ ALL _____ FROM _____ feet to _____ feet

Core chips to address below, full cores to USGS, Core Laboratory, Arvada, CO. Required samples must be washed, dried and delivered prepaid to:

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 2535 St. Johns Avenue
 Billings, MT 59102

